

Maine's Energy Education Future

PARTNERS:

**MAINE MATHEMATICS AND SCIENCE ALLIANCE
AUGUSTA SCHOOL DISTRICT
UNIVERSITY OF MAINE AT AUGUSTA**

**LAKE REGION SCHOOL DISTRICT
MESSALONSKEE SCHOOL DISTRICT
UNIVERSITY OF MAINE FARMINGTON**

In October, 2009, the National Science Foundation funded a Mathematics and Science Partnership “start-up” grant of \$300,000 to Maine educators to design ways of transforming teaching about energy literacy. The lead organization for the project is the Maine Mathematics and Science Alliance, in partnership with the groups named above. Advisors include Anita Bernhardt from the Maine Department of Education, John Dorrer from the Maine Department of Labor, Alan Lishness from the Gulf of Maine Research Institute, Earl Coombs from Kennebec Valley Community College, and Tom Berger from the Maine STEM Collaborative.

There are two necessary ingredients in energy literacy: First, an understanding of energy processes that transcends the boundaries of traditional courses in earth science, chemistry, biology, and physics. Second, an understanding of how energy principles translate to energy jobs. Career awareness is especially important in Maine, where we have abundant sources of wind, wave, solar, and biomass energy.

The project will be discussed on January 29, 2010 at the Maine STEM (Science, Technology, Engineering and Mathematics) Summit in Augusta, Maine. The Summit will bring together business and industry representatives, educators, and policymakers to raise awareness about STEM careers and educational pathways that lead to these careers.

The ripple effects of the 18-month project will be significant: We will emerge with a thorough needs assessment of energy literacy education in Maine. Completion of this design project qualifies us to submit a multi-million dollar proposal to NSF, which if awarded, would impact all 6th through 9th grade science teachers and students throughout the state. The larger proposal will involve additional collaborators, including schools, research institutes, nonprofit energy groups, legislators and policymakers, and workforce experts. As a result of this project, STEM educators will have better information about the needs of their students and about Maine's emerging energy resources. The work will complement a needs assessment study commissioned by the Legislature. It will also inform policy work that Governor Baldacci has targeted as essential to the state's economy.



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